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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/974,608	10/10/2001	Hitoshi Ebihara	SCEIWI 3.0-090	8455
530	7590	10/12/2005	EXAMINER	
LERNER, DAVID, LITTENBERG, KRUMHOLZ & MENTLIK 600 SOUTH AVENUE WEST WESTFIELD, NJ 07090			SINGH, DALIP K	
			ART UNIT	PAPER NUMBER
			2671	

DATE MAILED: 10/12/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/974,608

Applicant(s)

EBIHARA ET AL.

Examiner

Dalip K. Singh

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 March 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 2, 11 and 15-17 is/are rejected.
- 7) ☒ Claim(s) 3-10 and 12-14 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 October 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 1-25-2002.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 2, 11, 15, 16 and 17 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 5,237,686 to Asano et al.

- a. Regarding claim 1, Asano **discloses** an image processing system (Fig. 1), comprising: a plurality of processing units (...digital signal processor (DSP) modules (DMM's) 11a to 11k...col. 9, lines 45-55) each operable to initiate processing in response to reception of an execution enable signal and to produce a processing result (...the task control unit 7...determine an optimal processing block...for each of the DMM's 11a to 11k...each of the DMM's 11a to 11k decodes the command and executes the designated processing...col. 10, lines 21-27) and an execution end signal after completion of said processing (...every time the designated processing is completed, each of the DMM's 11a to 11k inform as the task control unit 7 of the completion of the task...col. 10, lines 28-31); a respective processing table for each of a plurality of applications, said processing table storing, identification information on one or more of said processing unit to which said execution enable signal is to be sent, and identification information on one or more of said processing units from which said processing result and said execution end signal are to be received (...a task table for storing information required for...to control the DMM's...col. 6, lines 1-16); and a control unit operable to control said processing units such that, in response to receipt of a processing request from a identification information

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on one or more of said given application, said execution enable signal is sent to said one or more processing units and said processing result and said execution end signal are received from said one or more processing units, in said order determined by said corresponding processing table for said application (...a task control unit instructing each of the DMM's about...processing block assigned thereto and the contents of a processing task to be executed through a control bus...col. 5, lines 65-68; col. 6, lines 1-2...the task control unit 7 retrieves the task table 8 to determine an optimal processing block...).

b. Regarding claim 2, Asano **discloses** wherein said processing units cooperate with one another to create frame image data with respect to divided images of a predetermined image, and to output said created frame image data as said processing result (...a plurality of DMM's each...are disposed in parallel, a picture frame is divided...into...blocks...processing tasks are determined fro each DMM...col. 11, lines 37-50).

c. Regarding claims 11, 15, 16 and 17, they are similar in scope to claim 1 above and are rejected under the same rationale.

Allowable Subject Matter

3. Claims 3-10 and 12-14 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Prior art fails to disclose or suggest a data processing system wherein a plurality of processing units include drawing processing means; geometry processing means and an image interface between drawing processing and geometry processing means; a plurality of M first arbitrator means for arbitrating operations and a second arbitrator means for arbitrating operations of said M first arbitrator means for the said processing means.

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Conclusion

4. The following prior art made of record but not relied upon discloses plurality of processors working in parallel to increase performance. U.S. 6,384,833 B1 to Denneau et al. (3D geometry processing in a pipeline to increase performance); U.S. 6,570,571 B1 to Morozumi (preventing image processing performance degradation by calculating loads to be processed by plurality of processors); U.S. 6,434,590 B1 to Blelloch et al. (assignment management to tasks to plurality of processing elements) and U.S. 6,753,878 B1 to Heirich et al. (image generation using a plurality of engines, each rendering a part image and a merge engine).

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Dalip K. Singh** whose telephone number is **(571) 272-7792**. The examiner can normally be reached on Mon-Friday (10:30AM-6:30PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Ulka Chauhan**, can be reached at **(571) 272-7782**.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, please contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). Please note that the new Central Official FAX number for application specific communications with the USPTO is **571-273-8300** (effective July 15, 2005).

Dalip K. Singh
Examiner, Art Unit 2671

dks
September 27, 2005


ULKA J. CHAUHAN
PRIMARY EXAMINER